

Migrational homing by a pair of Mallards.—It is generally assumed that wild, North American female dabbling ducks (Anatinae: Anatini) select new mates each year and may return to the same nesting areas in consecutive years (McKinney 1964, *Wildfowl* 16: 93). Lincoln (1934, *Bird-Banding* 5: 151) first documented migrational homing in a female Mallard (*Anas platyrhynchos*), and Sowls (1955, *Prairie ducks*, Harrisburg, Pennsylvania, Stackpole Co., pp. 25–45), working with color-marked birds, established that female Pintails (*A. acuta*), Gadwalls (*A. strepera*), Shovelers (*A. clypeata*), and Blue-winged Teal (*A. discors*) also return to previously used nesting areas. Black-bellied Tree Ducks (*Dendrocygna autumnalis*), in the same subfamily as the true geese (Anserinae), not only home to previously used nesting sites, but also retain the same mates in consecutive years (Bolen 1971, *J. Wildl. Mgmt.* 35: 386). Instances are recorded of males in the subfamily Anatinae returning to the same locality in consecutive years (Sowls, *ibid.*; Lewis Cowardin, pers. comm.), but no information exists on the homing of pairs.

During the course of a study on the social behavior and habitat use of various dabbling ducks in North Dakota, we documented the migrational homing of a pair of Mallards. On 6 May 1971 we captured a pair of Mallards in a cannon-net trap and affixed numbered nasal saddles and a miniature radio transmitter to both the hen and drake. The drake's transmitter failed in a few days, but the hen's transmitter allowed us to locate the pair several times until 2 June 1971. Our last record for the hen was on 15 June 1971. We never found a nest site, and feel that she did not raise a brood.

On 15 April 1972 the pair was sighted loafing on the ice of a partially frozen pond, 1 mile from the last observation point in 1971. Both birds were still wearing the radio transmitters and nasal saddles from the previous year. Daily visits to the area had not revealed the pair before 15 April 1972. The pair was sighted many more times, delineating a home range overlapping the previous year's.

Lebret (1961, *Ardea* 49: 137), working with a residential Mallard population in the Netherlands, documented a few instances of females retaining the same mates in consecutive years. He attributed this phenomenon to either a female rejoining her mate after a destroyed clutch and molting with him, or a female finding her previous mate on the molting ground. We suspect that Lebret's first explanation applies to our observation.—THOMAS J. DWYER, SCOTT R. DERRICKSON, AND DAVID S. GILMER, *U. S. Bureau of Sport Fisheries and Wildlife, Northern Prairie Wildlife Research Center, Jamestown, North Dakota 58401*. Accepted 11 Sep. 72.

A possible hybrid Wattled Jacana × Northern Jacana in Costa Rica.—In the winter of 1971 I was able to compare the social behavior of four jacanas living in a small marsh on the Osa Peninsula in southwestern Costa Rica (6–9 March) with that of a population of the Northern Jacana (*Jacana spinosa*) living on a large open pond at Turrialba, Costa Rica (27–30 January). The latter population has been extensively studied by Jenni and Collier (1972, *Auk* 89: 743). The Osa marsh, approximately 100 m long and 40 m wide, lies on the west side of the road leading south-southwest from Rincon, about 6 km beyond the Tropical Sciences Research Center.

Two of the birds at the marsh were mist-netted, weighed, photographed, and released. The following descriptions are based on field observations and on these photographs. Three of the jacanas had bright yellow, trilobed frontal shields and plumage coloration typical of *J. spinosa* (Figure 1). One of these, an immature female, was larger than the other two but had not yet molted into adult plumage. The other

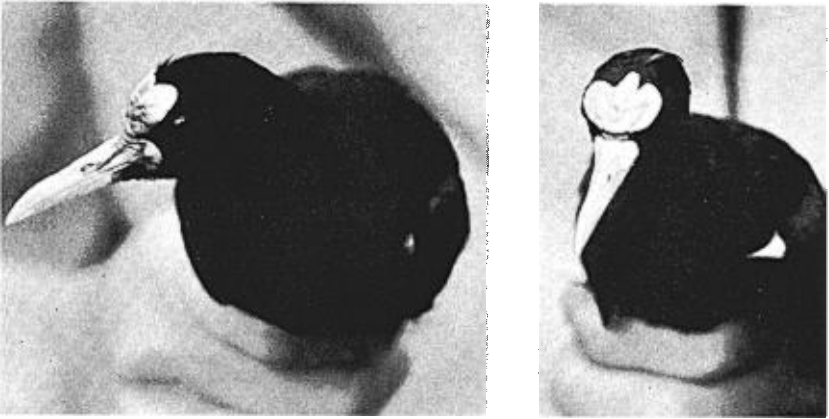


Figure 1. Left, probable adult female Wattled Jaçana \times Northern Jaçana hybrid showing the trilobed frontal shield and rictal wattles. Right, adult male Northern Jaçana. The birds were photographed in hand on the Osa Peninsula, Costa Rica. (Reproduced from a Kodochrome taken by Louis F. Pitelka).

two were adult-plumaged males that could be individually identified. One male (weight 78 g) defended the southern half of the marsh where tall, emergent vegetation grew only around the periphery. The other male and the immature female spent most of their time in the northern end, which was almost totally covered by 2–3-foot high aquatic grass.

The fourth individual (Figure 1) was a female weighing 113 g. She spent nearly all her time within 15 feet of the territorial male, but I observed no overt interactions between them. Her plumage coloration was essentially that of *J. spinosa*, but the black of the neck extended into the middle breast region and there was a brown wash over the chestnut coloration of the back, wings, and lower breast. Her frontal shield was definitely trilobed, but it was not the bright yellow color of *J. spinosa*. Instead, the two large outer lobes and the tip of the small median lobe were pale blue and the rest of the median lobe and the central portion were dark red. In addition, she had rictal wattles that were dark red except for a pale blue posterior edge. The wattles and the dark red color are characteristic of the Wattled Jaçana (*Jacana jacana*), but the pale blue color occurs only in *J. spinosa*, which has a blue band on the dorsal base of the bill and which sometimes has blue on the base of the shield.

Wetmore (1965, *The birds of the Republic of Panama*, Smithsonian Misc. Coll. 150: 372) recognizes two populations of jaçana, but says that they are "superficially so similar that there has been uncertainty as to their status." He treats these populations as separate species that may hybridize to a small extent. The ranges overlap in western Panama and the two species may be found on the same ponds in eastern Chiriqui and in Veraguas. He describes five specimens in the British Museum from around Calobre in eastern Veraguas that appear to be hybrids. They have rictal wattles and three-lobed frontal shields, although the middle lobe is small on three of them. He makes no note of the coloration of the shield or wattles. One had a black back, but the other four had at least some maroon (chestnut) coloration on the back. Chestnut coloration is typical of *J. spinosa* but is not uncommon on upperparts of *J. j. hypomelaena*, the race found in Panama.

Whether one classifies the Northern Jaçana and the Wattled Jaçana as separate species or as subspecies of *J. spinosa* is not important here. The two groups do hybridize and the adult-plumaged female I netted is probably such a hybrid. Apparently this is the first record of a hybrid from Costa Rica. The Osa marsh is about 200 km from Remedios, Panama, the nearest place where the two groups have been reported together, and 260 km from Calobre, Panama, the only locale where hybrids have been definitely reported previously.

The observations at Osa were made while I was a student in the Organization for Tropical Studies. The observations at Turrialba were supported by NSF Grant GB 21279 to D. A. Jenni.—BURR J. BETTS, *University of Montana, Missoula, Montana 59801*. Accepted 13 Sep. 72.

The Least Bittern in Mexico and Central America.—The Least Bittern (*Ixobrychus exilis*) has been reported from widely distributed localities in Central America, often on the basis of one or only a few specimens. The A.O.U. Check-list of North American birds (1957, fifth ed., Baltimore, Amer. Ornithol. Union) considered the status of birds from Central America to be uncertain, and the Mexican checklist (Friedmann et al. 1950, Pacific Coast Avifauna, No. 29: 33) recognized that some Mexican specimens were not identified subspecifically. During the course of research on the avifauna of the freshwater marshes in Mexico during the period 1959 to 1971 and other areas of Central America 1967 to present, large series of Least Bitterns have been assembled and additional material is available in other collections. To evaluate the systematic position of the populations of Mexico and Central America it was necessary first to reevaluate the characters of the two North American forms, *I. e. exilis* and *I. e. hesperis*.

Dickey and van Rossem (1924, Bull. Southern California Acad. Sci. 23: 11) described *I. e. hesperis* as similar in coloration to *exilis* "but larger in all dimensions, particularly in wing, tail and bill; tarsi and feet not only longer but heavier." Apparently all subsequent authors have relied on their measurements for identifying Least Bittern specimens. While measurements of larger series of additional specimens from the United States seem to uphold *hesperis* as a valid form based on the length of the wing, the extent of overlap is great and it barely averages larger in all other measurements (Table 1). With the larger series, averages for measurements of wings and tails tend to be slightly larger for *exilis* and slightly smaller for *hesperis* than those Dickey and van Rossem presented. No color differences could be found among large series of either sex nor among series of juveniles. Sexual dimorphism in size is very slight, ranging from about 1 to less than 3 percent, and essentially can be ignored.

Baja California populations are large (Table 1), while a male from San Blas, Nayarit (wing chord 121, tail 46) and a female from coastal Guerrero (wing 123, tail 42) are large but have somewhat short bills (41 and 42 respectively). The nesting populations of Tamaulipas and Veracruz, Mexico, the Peten and Pacific coastal lowlands of Guatemala, Belize, Honduras, and Costa Rica are all small with wing (chord) measurements mostly near or below the mean values in *exilis*.

The decision as to whether to recognize *hesperis* is more complicated when the populations of Least Bitterns from the Mexican Plateau and from the highlands of Guatemala are examined. The 45 adults (26 males, 19 females) available from the highlands of Mexico are intermediate in size between the population of eastern and western North America.

The series of Least Bitterns from San Lucas, Lake Atitlan, Guatemala was dis-